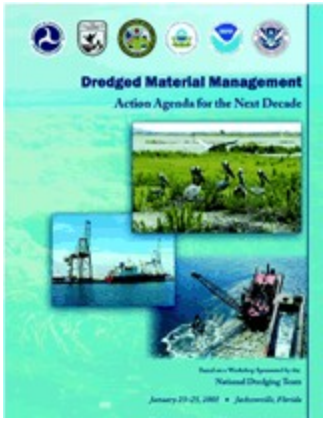
Watershed Sediment Management: Challenges and Outcomes from the Southeast

Daniel Small
U.S. Army Corps of Engineers
South Atlantic Division
Atlanta, Georgia

USACE 2008 Planning Community of Practice Conference
San Antonio, Texas
May 20- 22, 2008



Overview of Presentation

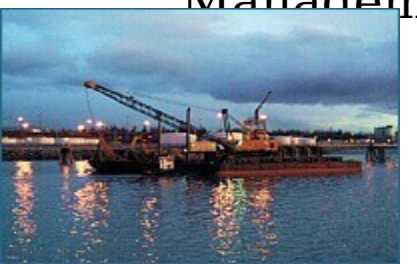
- National Conference on Dredging and Watershed Sediment Management
- Southeast Region-Managing Sediments in the Watershed Conference
- Watershed RSM Demonstration Projects-Selection Criteria
- Mobile Bay and Basin Watershed RSM Demonstration Project
- Take Away Points

National Conference on Managing Sediments in the Watershed:
Bringing Dredged Material and Watershed Managers Together
August 2006, Portland, Oregon

Sponsored by the National Dredging Team

Objectives

- Dredging and sediment management in watersheds
- Collaborative Planning and Management
- Increased Coordination and Communication
- Focused on Integrated Solutions to Watershed Sediment Management



Southeast Watershed Sediment Management Conference

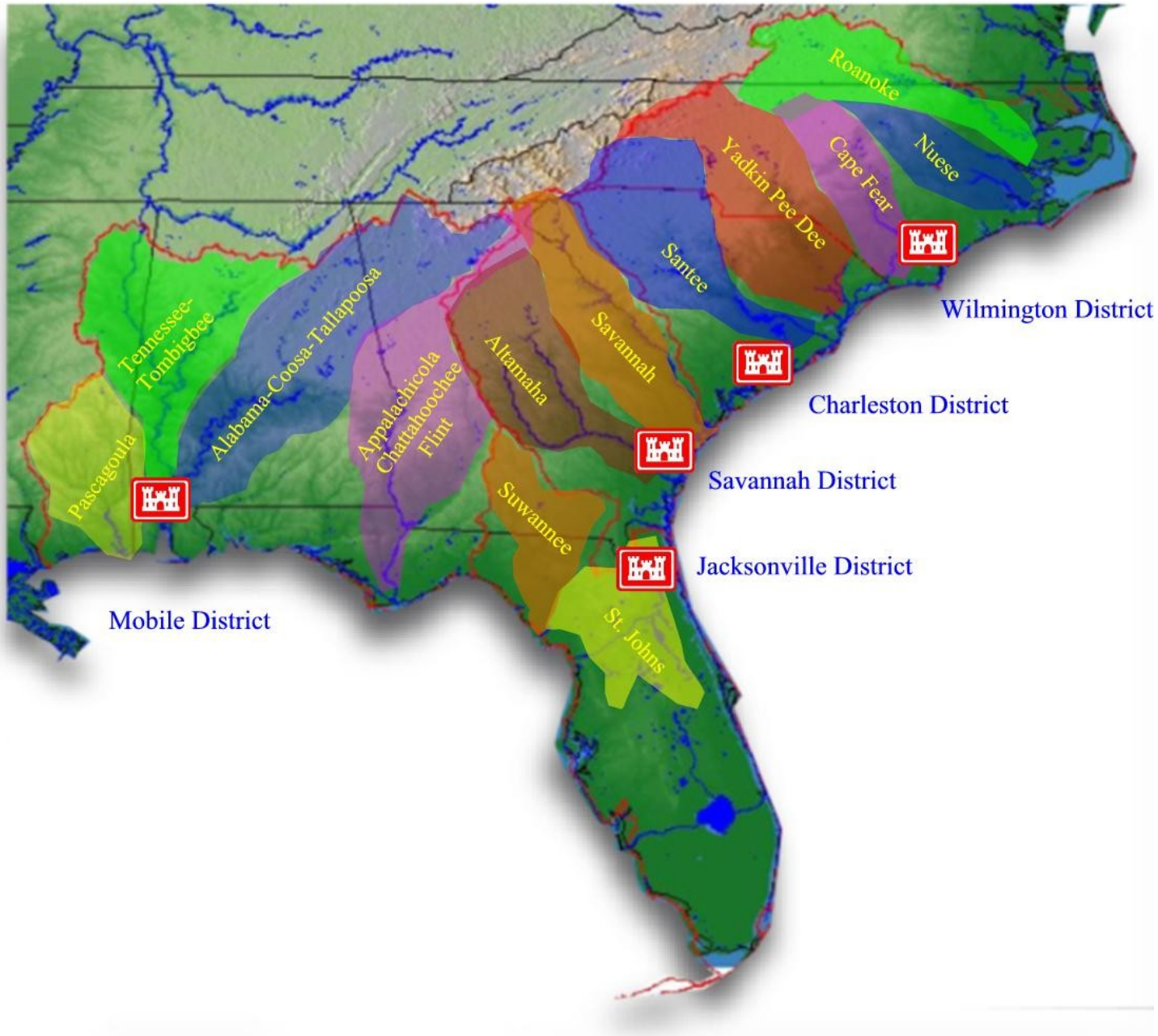
29-30 August 2007

Atlanta, Georgia

USACE-SAD and USEPA Region 4

Objectives

- Regional Sediment Management (RSM) Program
- Regional coordination and collaboration
- Watershed Sediment Management Opportunities
- Regional Sediment Management (RSM) Watershed Projects
- Implementation of RSM Watershed Demonstration Project


Roanoke
Yadkin Pee Dee
Cape Fear
Nuese
Santee
Wilmington District
Tennessee-Tombigbee
Alabama-Coosa-Tallapoosa
Appalachicola Chattahoochee Flint
Altamaha
Savannah
Charleston District
Pascagoula
Savannah District
Suwannee
Jacksonville District
St. Johns
Mobile District

Watershed RSM Demonstration Project Selection Criteria

- Multi-objective sediment management project
- Leverage and enhance existing studies and efforts
- Identify knowledge gaps in sediment management
- Enhance information exchange and management

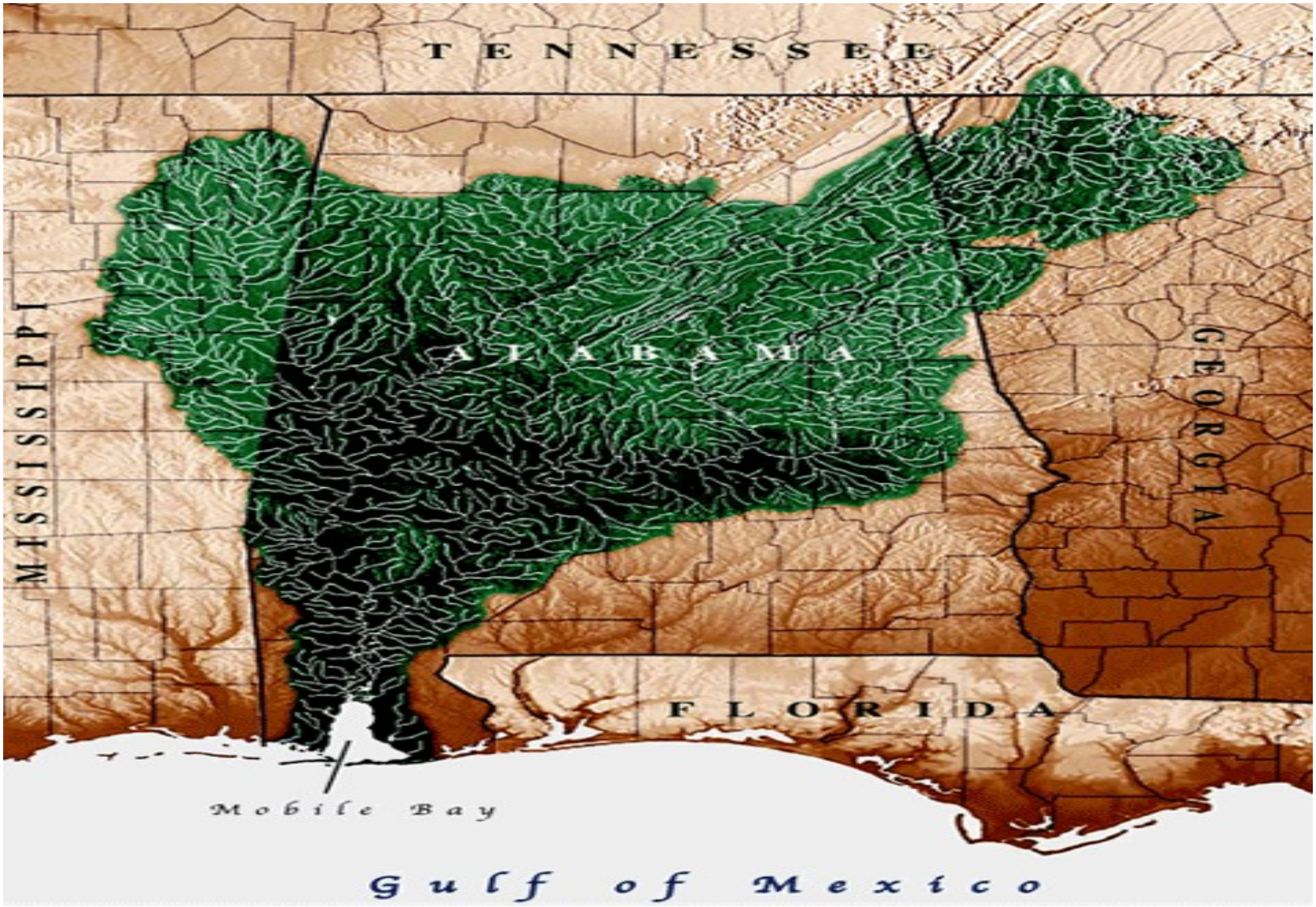
Selection Criteria (continue)
RSM Watershed Demonstration Project

- Develop watershed sediment management strategies
- Discrete to systematic project approach with specific goals
- Knowledge transfer and dissemination (portable knowledge)
- Holistic watershed approach
- Dredging-Sediment Management opportunities

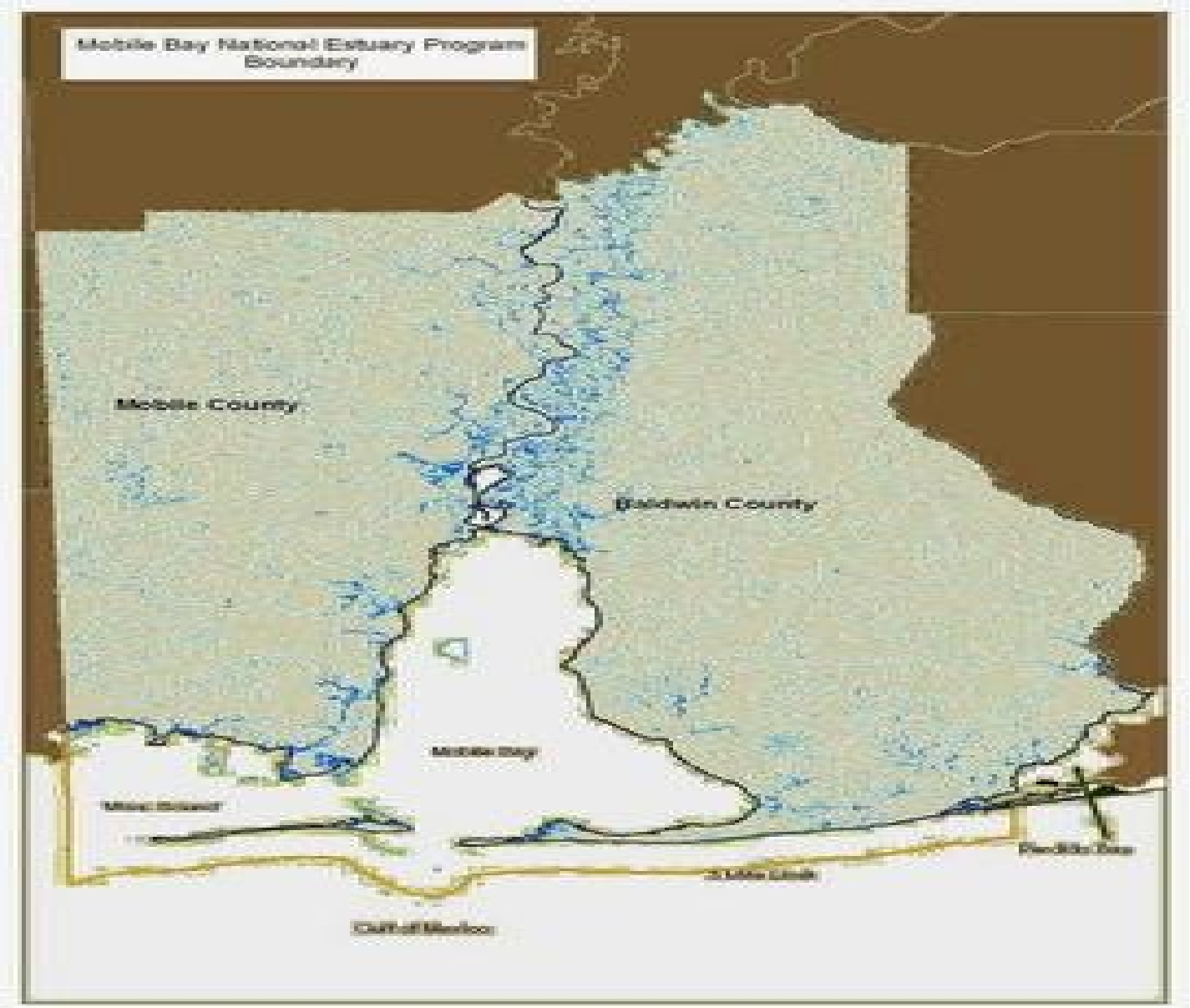
Selection Criteria (continue)
RSM Watershed Demonstration Project

- Sub-watershed opportunities
- Beneficial use and restoration opportunities
- Application of innovative technologies, tools, management strategies
- Disposal sites management and sustainability

Mobile Basin



Mobile Bay


Mobile Bay National Estuary Program
Boundary
Mobile County
Baldwin County
Mobile Bay
Gulf of Mexico

Goals
Mobile Bay and Basin
RSM Watershed Demonstration Project

- Watershed-Regional Sediment Management (RSM) approach
- Enhance sediment management collaborative process
- Leverage existing resources, programs and authorities
- Share existing data-identify data gaps
- Implement watershed sediment budget

Goals (continue)
Mobile Bay and Basin RSM Watershed Demonstration Project

- Numerical model developments and implementation
- Implement Geographic Information System (eBasin GIS)
- Matrices for dredging and watershed sediment management
- Develop comprehensive sediment management plan
- Applicability of watershed RSM findings to other watersheds

Key Take Away Points

- Strengthen collaborative skills
- Manage traditional perceptions and attitudes
- Establish common language and goals
- Build social capital and sustainability

Key Take Away Points (continue)

- Capitalize on existing knowledge, models, tools and technologies
- Visualize new approaches, strategies, measures
- Minimize repeating lessons learned

References

- **National Conference on Managing Sediments in the Watershed:**

http://www.epa.gov/owow/oceans/ndt/managingsediments.htm

- **FY 2006 Civil Works Watershed Assessments:**

http://www.usace.army.mil/cw/cecw-cp/news/watershed_06.html

- **National Dredging Team Action Agenda:**

http://www.epa.gov/owow/oceans/ndt/actionagenda.html

- **General Accountability Office: Report 08-262 Natural Resource Management. February 2008**
- **General Accountability Office: Report 06-15 Results-Oriented Government. February 2008**